

# How Engineering Principles Indicate Living Cells Were Designed

## Implying A Living God Created Life

By

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### Living Cells Appear to Be Designed First and then Fabricated:

#### Genetic Information

Cells are controlled by information. Engineering principles show that information and the hardware needed to use it must initially appear with both already working. Small, step-by-step advances are inadequate to this task. This indicates design first, followed by fabrication.

#### Feedback Control

Cellular features are regulated by intricate feedback control loops. To have value, these must function properly from the beginning. Engineering principles show feedback systems require design first, followed by fabrication.

#### Cells make cells

Cells are only made by already existing cells. They use components that require design. Therefore, the entire initial cell must have been designed first, followed by fabrication. Natural physical processes are inadequate to make a living cell.

### Living Cells Need to Make a Sudden, Instantaneous First Appearance:

#### Dynamic Operation

Most cellular features are dynamic in operation: they constantly change according to need. Engineering principles show there is no smooth path able to turn static structures into dynamic ones. Dynamic structures must be specifically designed.

#### Temporary Bonds

Dynamic cellular activities use special chemical bonds which require a continuous supply of energy or the bonds dissipate and the structures disappear. These bonds are required for dynamic cellular activity including replication.

#### Sudden Appearance

All of the components required for a cell to make another cell must appear instantly. Otherwise, bonds dissipate and any progress is destroyed. This is why cells without energy die in minutes and cannot be revived. Only a living God can make a living cell appear instantly.

1) Science and Engineering working together show us that living cells are dynamic machines. 2) Their features appear to require design. 3) It appears that they require instant initial fabrication. Taken together, these requirements give solid basis to understand that a living God created living cells.

The front page is a short summary of the following article.

The article presents a thorough analysis of the issues summarized on the first page. This thoroughness is required because of the controversial nature of the issues.

Modern technology is the result of science and engineering working together. The role of a scientist is to uncover what exists in nature and how it works. Engineers then use these principles to make things.

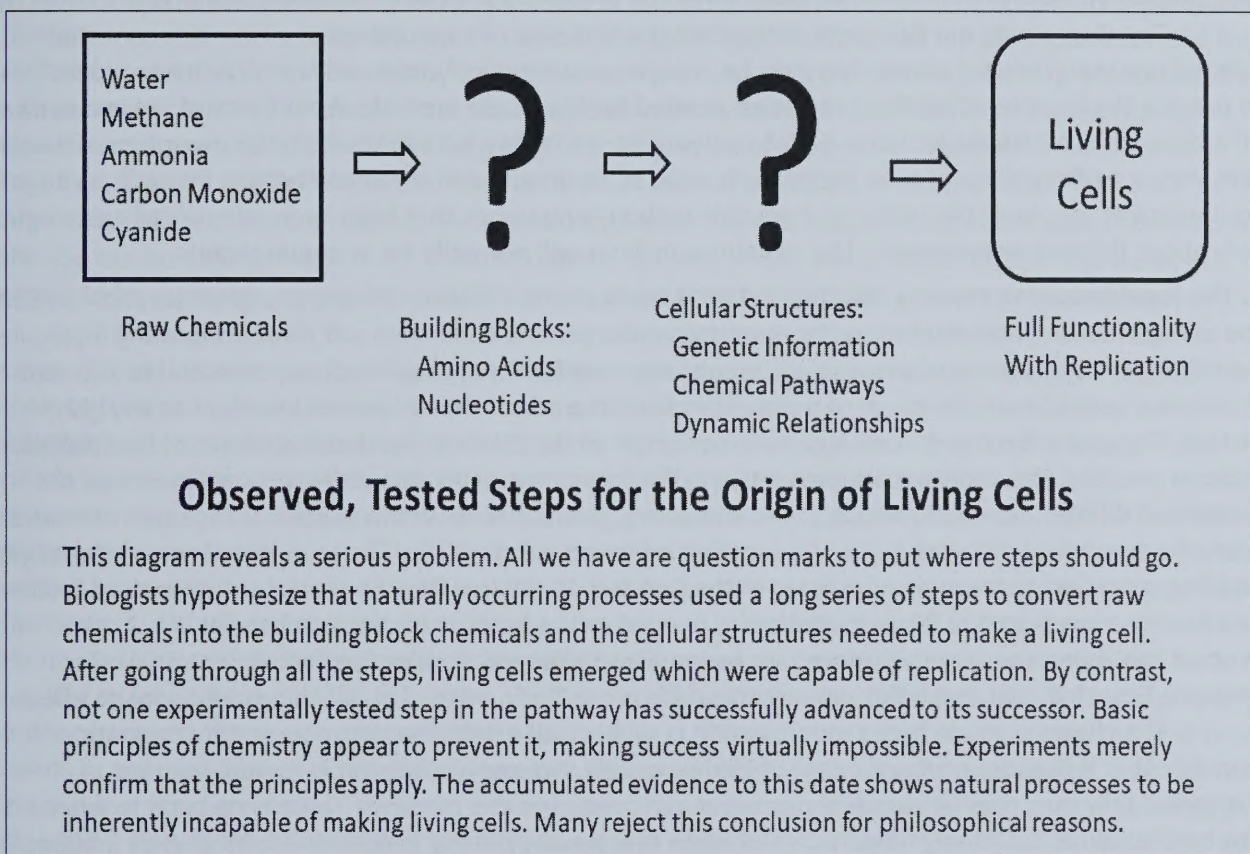
It is the author's position that the principles of engineering clearly show that the initial appearance of cellular life required an initial design followed by instantaneous fabrication.

The Bible says the testimony of the creation should lead us to understand God's eternal power and divine nature (Romans 1:20).

## 1. Overview

Today's world is full of problems. If there is no God, then man's intelligence is the highest available and is critically needed for solving them. If there is a Creator God, then man has the responsibility to find what God wants done and then to do His will. So, did God create life or did unguided, natural processes? Your entire perspective and priorities on life flow from your answer.

The perspective of this article is simple. A living God designed and then fabricated the creation in a way that it should clearly lead a person to understand His wisdom and power. Thus, in a highly technological society such as ours, biologists can describe features that characterize cellular life. Yet, as we shall show, they run into a dead end every time they try to show how natural processes could provide them. By contrast, engineers use their intelligence to design and build products using the same underlying technologies as do these unexplainable cellular features. The implication is that a living cell is not the product of natural processes but was designed. Moreover, there is nothing in nature to convert a design for a cell into living cells. When the issues are worked through, they make a strong case that God designed and fabricated cellular life. The entire philosophical foundation of modern science is challenged by this. A lot is at stake concerning the issues discussed here and the strength of the evidence offered in their support.



**Randomization.** Observed science reveals a single, virtually insurmountable principle that effectively prevents any and every potential step towards a natural origin of life from advancing to its successor: *randomization*. Randomization is the process of making a collection of objects possessing some degree of organization more random in structure by making random changes to them. As a side comment for those who might have a technical background, entropy is a mathematical measure of the degree of randomness in a system. Randomness is the fundamental behavior. As randomness increases, so does entropy. The important thing to understand is that a random change may temporarily increase order, but this quickly disappears as the process is repeated over a long period of time and the number of samples increases. Large sample sizes solidify the effect of randomization, they do not overcome it.

Although “randomness” sounds trite, so obvious it is hardly worth talking about, it actually has far-reaching implications. Well over a thousand experiments in abiogenesis—the scientific study of the origin of life—have been run over the past seven decades. Randomization has created a virtually insurmountable road block at each step, preventing any of them from successfully advancing. Furthermore, it is such a basic process that established science offers effectively no hope for natural processes to be able to overcome it.

Historically, experiments in abiogenesis were viewed as isolated, unrelated processes. Each faced its own unique set of problems. Hope was that in time, each could find its own resolution. However, in an article I have coauthored and published in preprint<sup>1</sup>, randomization was presented as the root cause for the failures that have invariably appeared at every tested step of abiogenesis. Unless and until this problem can be overcome, abiogenesis—the scientific study of the origin of life—should be considered a closed field. The primary issue facing abiogenesis is how to resolve the problem of randomization.

The following points are a brief summary of the preprint. The preprint gives proper citations for all of issues presented.

**1. Too many possible products.** Carbon, nitrogen, oxygen, hydrogen, sulfur, and phosphorous are the chemical elements used to make the amino acids and the nucleotides used in living cells. Amino acids are the building block molecules used to make proteins. Nucleotides are the building block molecules to make RNA and DNA, which in turn are used to store a living cell’s genetic information. There is a big problem: Modern science has revealed that the above six elements can be arranged in multiple millions of different ways, based on their selection and arrangement. The Wikipedia Article on *Beilstein Database* discusses this.

The diagram on our first page shows that the first step of a natural origin of life is to turn the original raw materials, whatever they may be, into an assortment of amino acids and/or nucleotides. This is to provide the basic building-block materials needed for life. There are only about thirty of these chemicals: 20 amino acids, 4 RNA nucleotides, 4 DNA nucleotides, and a few fatty acids. With the exception of a very few, very specific additional ones occasionally needed to supplement these, everything else acts as a contaminant. So, out of the millions of possible carbon compounds that have been scientifically catalogued, only about thirty or so are useful. The remaining millions will normally act as contaminants.

**2. The Randomization Process.** Starting with the raw materials initially present at a given location on Earth, the energy sources available to modify chemicals under pre-life conditions will rip apart existing molecules into a random assortment of many possible subcomponents. These then randomly reassemble into new molecules, based on a wide range of possibilities from the actual subcomponents present at any given instant. The goal is for the new molecules to converge on the 30 kinds needed for life out of the multiple millions possible. The problem this presents is self-evident. Invariably, the above process increases the number of different kinds of molecules present at any given instant. As this process is repeated over and over, the number of different kinds of molecules increases substantially. The assortment contains a larger and larger portion of the molecules listed in the Beilstein Database. The chemicals formed expand further and further away from the 30 or so molecules needed as the building block chemicals for life. As the process continues, the target 30 molecules become a smaller and smaller fraction of the total kinds present. Time does not make the appearance of life more likely. Instead, it has the exact opposite effect.

The charge is made here randomization is such a well-established physical and mathematical principle that it renders a natural origin of life impossible. No one has been able to demonstrate experimentally how pre-life chemical processes can overcome this problem. There is no basis to expect it can be overcome. Extremely fundamental science reveals why natural processes are inherently inadequate to create living cells. Honesty requires this to be acknowledged openly by scientists.

The problem gets worse. It has been experimentally observed that this process tends to gradually form gigantic, inert molecules called *tar*, *tholin*, and various other names. These gigantic molecules can become so tightly bonded internally that it is impossible to analyze them or use them. Initial raw chemicals gradually form an inert mass that consumes resources and interferes with any advance towards life. Tar is the ultimate product of every experiment in abiogenesis if the process continues long enough.

Item 6 on page 15 discusses how randomization thwarts a natural origin of life at the first and simplest step, provision of amino acids and nucleotides. It is like a race where the runner is crazy-glued to the starting blocks. He can’t even take the first step of the race. Without amino acids and nucleotides, no other steps of abiogenesis can take place. It is like trying to build a wood house without wood. Scientists do

attempt to test other hypothetical steps, though. They simply go to a chemical supply house and buy the chemicals they want, making sure they are uncontaminated and of laboratory grade purity. Such chemicals would never be available in real life. Even so, randomization ultimately also brings these other experiments to failure. This is also discussed in depth in my preprint.<sup>1</sup> As mentioned, long times do not help. Randomization quickly halts progress beyond recovery. Increased time does not help, it only makes matters worse.

The question marks that were used in the diagram on the first page are the direct result of randomization. Biologists have nothing experimentally verifiable to replace the question marks. They propose all kinds of steps. The problem is that as we have seen, the principle of randomization teaches against their proposals and subsequently their own experiments confirm the theory. They need to deny their own work in order to maintain the sufficiency of natural causes to provide the initial living cells.

## Intelligent Beings Can Make Things Natural Processes Can't

Modern science is based on the concept that natural processes can explain the appearance of everything that has occurred in the universe since the big bang billions of years ago. This philosophy is called *naturalism*. Its foundational premise is that no god or other non-physical forces capable of altering the flow of natural processes exist, have ever existed or will ever exist. Yet, this is merely a philosophical perspective. It certainly hasn't been proven. Here we will offer a simple analysis that shows that an intelligent being can design and make things that natural processes cannot. If true, this falsifies naturalism.

Suppose you are walking along the shore of a pristine lake with a sandy, white beach. Rising above the beach is a hill with a deep red color wherever the soil is exposed. The red is from top soil formed from underlying rock full of iron ore. Many trees and much grass are also on the hill. Suddenly, you come to a one room shack. It has a wooden floor, four wooden walls, a wooden door with iron hinges, wooden sheathing for a roof, and straw thatching to give some protection from rain. Iron nails hold the wood together. You ask yourself if this shack is the result of natural processes at work or made by a man.

All of the raw materials needed to build this shack are naturally present at the site. The iron ore in the soil can be used to make nails. The trees can be cut into planks and sheaths for flooring, walls, etc. The sand can be melted to make windows. The grass can be thatched to make a waterproof roof.

For a man to build the shack, in addition to the initial raw materials he needs proper tools to convert them into useable building materials. There need to be tools to smelt iron ore into iron and then tools to fashion nails and hinges from it, tools to cut wood into the precise dimensions and quantities needed, tools to make glass out of sand and to cut the glass into the proper sizes for the windows. He needs to know how to use the tools to make the specific products required. He needs a *design*: a set of instructions to convert supply materials into building materials using the available tools. Once the building materials are available, he then needs another set of instructions (a design) to specify the quantity of the various materials, the required tools, and the proper procedures and steps to use them properly. Whether the design is in his head or is documented in a blueprint or some other kind of instructions is not important. He needs to have a workable plan available which defines how to use the available materials and tools needed to fabricate the final product. He also needs to have the physical ability to use the tools properly in order to convert the design into an actual physical object. Finally, once construction starts, the final product needs to appear before natural decay processes destroy whatever has been formed earlier, thus rendering it worthless for current use. This is not a trivial issue. The author once started to construct a building, got diverted a lengthy time with higher priority issues, and when he came back found that too much rain and sunshine had destroyed what he had started. Such is life.

The natural response to seeing a shack on a hillside is that someone built it.

Would it possible that unguided natural processes might have converted the raw materials into suitable building materials and then assembled them into the shack? After all, modern science teaches that everything from the big bang until now is purely the result of natural processes at work on available materials. The first step is to determine the kinds of natural processes that might be available. These processes would then need to turn the raw materials at the site into the shack.

In general, nature can shine sunlight on an object. Sunlight includes ultra-violet light and can be useful to drive some kinds of chemical reactions. In addition to sunlight, natural processes are pretty much

limited to lightning strikes, wind, moving air, moving water, and colliding objects. These processes are the tools nature has to work with. They are what might be present on a planet or moon where living cells are not already present. Notice, natural processes do not possess intelligence. Sunbeams do not consider alternative choices and select a desired one to meet some purpose. In fact, biologists firmly reject any form of intelligence working in the processes they ascribe to evolution in general and extend to the origin of life.

### **A Critical Limitation of Natural Processes: No Specialized Tools**

The above discussion reveals a critical shortcoming of natural processes. They neither have the tools required to do certain actions required in making complex objects nor do they have the innate capability of using such tools if they did exist. They are limited to providing only things that can be made directly. The number of objects that can be made directly by sunlight or wind etc. is very limited.

Tools pose two very real problems. First of all, they are too complex to appear through exclusively natural processes. The only value of a tool comes from its being used to make something else. There is no way that evolutionary processes could slowly develop a required tool, because there is no selection advantage in putting together a sequence of steps that have no value until they can make another object which itself cannot exist without the tool. Tool formation requires single-step, sudden appearance.

Second, as mentioned natural processes do not have the innate capacity to use a tool. How could sunlight or wind use a hammer to nail together boards with precision in order to make a shack?

In conclusion, everything we observe teaches against the possibility of sunlight, wind, rain, lightning strikes, and colliding objects being capable of building the shack. Even a child should be able to understand this. A simple task for an intelligent being with the proper raw materials, tools and ability to use the tools is far, far beyond the capabilities of natural process to perform. Wind, sunlight, and other natural sources of energy will never make a cell phone. They can't even make a baby's crib. But they can destroy both.

**Design solves the problem of randomization.** Design is significant because it eliminates the problem of randomization. An intelligent being uses his understanding and experience to define a set of instructions which make the desired object directly, without the random trial and error failures characteristic of natural processes. When millions of possible options are available and only a handful of these are suitable, an intelligent being can design and build things that selectively use only the suitable options. Unguided random processes cannot do this. The significance of this observation cannot be underrated. Moreover, where specialized tools and a means to manipulate them are required to make something, such as the hinges for the shack or even the shack itself, natural processes are completely inadequate to the task. Natural processes do not accumulate understanding usable for future efforts. By contrast, man's ability to make sophisticated objects is the result of accumulated knowledge and experience passed down through generations plus his ability to make and use tools. Natural processes are simply unable to compete with the things a man can do.

Intelligence exists in the universe. Man is an example. So is a spider as it uses its intelligence to build its web, although the degrees of intelligence are greatly different. Therefore, if common observation clearly shows that intelligent action is required to explain the appearance of an object, it should not be considered taboo to admit it. The things we just discussed lead to a natural conclusion that intelligent action was used in the design and fabrication of the initial living cells. If the evidence truly points in this direction, a person should not be afraid to admit it and openly acknowledge it. He should not be afraid of the natural conclusions that follow from it, whatever they might be.

The natural conclusion of the above discussion is that modern technology makes a strong case for the original cells being designed. There is no other known rational alternative. It appears that the only argument against this is personal philosophical bias, which does not constitute valid science.

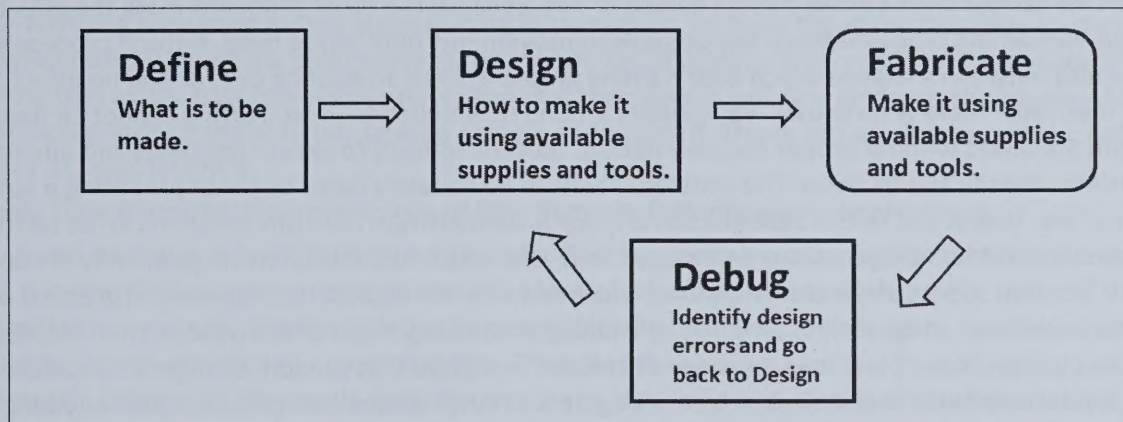
This leads into a simple question. What are the characteristics that would be required of a being capable of designing and then fabricating a cell? First, we will briefly look at the design process. Then, when compare the kinds of things the most highly intelligent and trained men design with the intelligence that would be required to design a living cell, it naturally leads to the conclusion that living cells were created by a Being possessing super intelligence. Observed evidence will lead to understanding that God created life.

At a certain point a scientist needs to face reality. The original cells appear to have been designed by a super-intelligent being.

This situation is particularly relevant in the light of 2 Peter 3:3-5 in the Bible. The passage talks about how the time will come when people will mock those who believe God and His Word, claiming that everything has continued throughout history as it has from the beginning. In today's jargon this means everything that has occurred since the big bang is the result of natural law. Proponents of this philosophy tend to mock those who prefer God over their perspective. According to the passage, they will have essentially no interest in hearing the evidence for anyone who disagrees with them. It is amazing how accurately the above passage from the Bible portrays the philosophy, mindset, and practice of modern science.

## Engineering Technology and Methodology

Since design engineering is being presented as the model of how living cells may first have appeared, it is appropriate to explain the engineering model.



### The Engineering Model

The above model represents the engineering method. This method has proven effective in allowing engineers make new products which are controlled by information, which have complex, interacting chemical reactions, and which have dynamic operation. These are analogous to many of the key characteristics of a living cell. Engineering gives us a good model for the appearance of living cells.

This model has four steps to it. Notice, every step requires intense intellectual effort.

1. **Define.** The first step in building a complex object is to define what is wanted. The primary purpose of the design is to meet this desire. Doing this requires intelligence. Normally, at least three major issues need to be resolved. First is to define the purpose of the object. What do you want it to do? Second is defining the raw materials to make it. Third is defining the tools to make it. The task of an engineer is to design things that can be built and can work once they are built. This limits the definition to what is possible, unless a person is doing research to extend what is known and understood. These three basic issues can be expanded and refined all kinds of ways, such as time frame to build, financial requirements and availability, required product lifetimes, and so on. However, the definition of what the product needs to do and the resources of raw materials and tools available to make it are basic issues, the starting points.

2. **Design.** The second step is to design the object. This activity requires intelligence. The design is a plan showing how to make the desired object using available materials and tools. The design is a symbolic representation of a physical reality. The symbols are whatever the designer chooses to use in order to represent the physical objects and their relationships.

3. **Fabricate.** The third step is to fabricate the object. This activity requires intelligence. Tools are used to transform available raw materials into actual physical objects. Since the symbols used in the design are basically whatever the designer chooses to use, there is nothing in nature which can convert design symbols and sequences into a physical reality. Man is limited in what he can fabricate by the kinds of tools he can make to do the conversion as well as his ability to understand the plan and use the tools.

**4. Debug.** The fourth step is to debug the design, i.e., to fix the problems that invariably appear. Frequently, this is the hardest part of engineering. In an electronics design of a complex project requiring many engineers working cooperatively, the author's experience has been that it can often take three to five times as long to debug a design as it does to do the design itself. This activity frequently requires the greatest intelligence of all the steps. Proper debug typically requires specialized tools to help figure out what is happening and why things are not working properly. A trained engineer will first study the design documentation and predict what a particular measurement should be, will compare it with what is actually observed, and will decide what needs to be changed. Then this information is used to redesign the object in order to fix the problems. After this the changes needed to be implemented, either by fixing the original fabrication or by redoing it. This process is repeated as needed. Debug can be so difficult that it is common for all kinds of new problems to be discovered even after a product has started selling in the market place.

**The fatal effects of multiple errors without debug tools.** One of the major obstacles facing a natural origin of life such as proposed by biologists is that there is no means to identify problems. There is no design documentation, no specialized tools are available to uncover the problems, and no intelligence available to analyze what went wrong. If multiple fatal errors are present, there is no means to isolate them. One cannot tell if a given change helped or not, because the other problems mask the effects of the change. Remaining problems mask any possible improvements until all are fixed. Natural processes cannot distinguish between a change which added a new problem, fixed an existing one, or had no effect. This issue is serious. There is no known way to work around it. Simultaneous fatal errors cannot be fixed by random processes without proper documentation, specialized tools to isolate problems and intelligent analysis to identify and fix them. This problem needs to be squarely faced by those proposing a natural origin of life. Unless and until a biologist can physically demonstrate how this problem can be overcome, one should consider abiogenesis to be a closed field, one which has absolutely no possibility of success.

So, that aspect of the design process which requires the highest intelligence and greatest amount of time to perform adequately is assigned by a biologist studying origin-of-life issues to non-intelligent, random changes. An experienced engineer will readily recognize that random changes to a complex design typically destroys what might already be working. It is a rather unique exception if it fixes anything.

**Replication.** Technically speaking replication does not belong in the discussion on engineering but is one of the characteristics of living cells. However, it appropriately goes here concerning the origin of life because biologists use replication along with mutation and natural selection as their means of debug.

Engineers quickly learn that the critical issue is not how much of a project works properly, but how much does not. A failed "O-ring" caused the space shuttle Challenger to explode on take-off and kill all of the astronauts on board. It did not matter how much of the rocket worked. The failure of what seemed to be only an insignificant component overrode the effectiveness of otherwise great technological accomplishments. To an engineer, this represents a normal situation. Biologists refuse to recognize the problem. To them, it does not matter how many problems prevent something from being usable. As long as a chemical appears that might have potential use with proper concentration and purity, the biologist calls it a success. He then depends on evolutionary processes to get rid of the undesired chemicals. We just saw this doesn't work. A biologist cannot point to a single experiment that does this successfully and thus justify this position. But, his personally preferred philosophy of "only natural processes allowed" overrides consistent observations, no matter how consistent they might be. Once contamination has appeared—and it does so at every step—it has never been shown how natural process could eliminate it. Randomization and entropy prevail. In summary, engineers have continual illustrations of how even the tiniest problems can be fatal. Yet, because they are so tiny, they are almost impossible to identify and fix. So, the concern in engineering is not what is working, but what isn't. Biologist need to recognize this problem before claiming that natural processes are adequate to form the initial living cells.

There is a major problem with the biologist's approach to debug. It requires replication to be available from the earliest steps. This is because replication is essential to evolutionary modification, which is the only tool available for natural processes to fix problems. A design engineer recognizes the fallacy of this line of reasoning. A biologist also should. Replication is essentially the final stage of cellular development, not the first. Many major cellular features need to be in place before a cell can replicate properly. A biologist should understand this. Moreover, every cellular component used in replication needs

to be accurately predefined in the genetic code before replication can take place. It should be obvious that replication cannot be the tool used to make the initial components used for replication.

When challenged about this, all a biologist can say is, “Well, that’s another paradox we haven’t figured out. It is challenges like this that make science so interesting....” Somehow though, it seems that seven decades of nothing but paradoxes and “interesting challenges” with no citable successes and which cover broad areas of investigation should be a red flag. Perhaps they should recognize that the paradoxes might in truth be fatal roadblocks. Perhaps cumulative observed evidence clearly shows that natural processes are incapable of creating life. These problems are not in unknown areas that need to be investigated. Instead, they have been extensively investigated. The more they are studied, the stronger the evidence against their possibility becomes. If naturalism collapses under this recognition, so be it. Admit it.

A professional design engineer needs to design objects that work or he changes his career. Perhaps it is more correct to say his career gets changed for him. No one wants to hire a design engineer who can’t design successfully. Unlike a biologist working on origin of life issues, an industrial design engineer cannot merely call a design problem a “paradox” and then proceed to ignore it while he builds an airplane or an x-ray machine that has fatal design errors and doesn’t work. Only biologists have this privilege. Biologists can propose anything they want for the steps leading to living cells. To them the important issue is whether their explanations support the philosophy of naturalism, i.e., that natural processes are adequate to explain everything that exists, that they always have, and that they always will. Any evidence challenging this philosophical priority is immediately labeled as false and rejected. This approach does not fit the definition of science as I was taught it.

#### **Allowable Time Frame for the appearance of life: Virtually Instantaneous. Implications.**

A cell is unique. It is not built on an assembly line, such as is the case for things made by man. Instead, it makes its own components as needed. Many of its components self-assemble. Some of these can also disassemble when no longer needed and reassemble when the need arises again. Special bonds called “metastable” bonds are used to accomplish this. These bonds require a constant flow of energy to maintain their strength. Otherwise, the bonds dissipate and the objects fall apart. Details of this behavior are discussed in my preprint article discussed earlier<sup>1</sup>, but are too involved to go into detail here. They do have a unique characteristic, though. Metastable bonds require a constant flow of energy into them in order to prevent dissipation. This is why cell death occurs within minutes—virtually instantly—when energy supplied by a cell’s metabolism is cut off. For instance, if a person’s heart stops beating, oxygen to the brain and other body parts is cut off, metabolism stops, and the cells die from lack of energy due to failed metabolism. Once a cell has degraded to a certain point, it can no longer function properly and quickly dies. Reapplying oxygen flow does not bring a cell back to life once its degradation has become severe enough.

This presents a problem for a natural origin of life. How does a static collection of chemicals make the transition into a dynamic self-organizing assembly? These chemicals fall apart in minutes unless they can self-assemble properly from the beginning. Yet, they are extremely complex. The millions of years biologists like to talk about as being available for life to form are not available for the chemicals involved in self-assembly. Entire groups of these chemicals need to make a simultaneous, fully-functional appearance before any have value. Various other cellular components required in order to support their need for a constant supply of energy also need to appear simultaneously. Biologists merely refer to the problems as paradoxes and proceed to ignore any significance they might have. In truth it becomes another piece of strong evidence against the adequacy of natural processes to create life. Sadly, this evidence is ignored and never discussed by most modern scientists whenever they speak to the general public.

The requirements of a cell to fully form virtually instantly give yet more basis to understand that God created life. It would take the super-intelligence of God to be able to design a living cell which can use self-assembly processes with their requirement of a continual supply of energy. It would take a God who is not limited by natural law to implement the design, fabricating the complete cell in an instant, as science shows is required. The combined observations of science and engineering clearly lead to understanding that God created life. We just need to be willing to consider the evidence He gives us.

A living cell is far more complex in its structure and functionality than anything man has ever made. It appears that a being with super-intelligence would be required to design a cell with the above features. However, an engineering design is useless without the tools and materials to convert the design into a physical reality. Cells operate at the atomic and molecular levels. Fabricating a design for a living cell would require the designer to have the power to move the specific atoms and molecules making a cell into the designed relationships. Natural processes appear to be inherently incapable of doing this. After the issues are worked through, it appears that the designer needs to have the power to directly move specific atoms and molecules into the designed relationships at will—i.e., he needed to have the power to work outside of and independently of the laws of nature. The principles of engineering lead to the understanding that God created life.

**God  
Created  
Life**

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- Natural processes have extremely limited capabilities to make objects.
- It appears that an intelligent being can design structures beyond the capability of natural processes to design. This applies to men and God.
- No citable successful origin-of-life experiments, where tested steps advance to the next. The causes of the failures are understood.
- Science shows key features a living cell needs to function properly:
  - Information and associated cellular hardware to use it—
  - Elaborate, intertwined chemical processes—
  - Dynamic operation, including self assembly and disassembly—
 but cannot show how natural processes can provide them.
- Engineering shows how to use intelligence to design systems with these kinds of features.
- The implication is that the above cellular features are beyond the capability of natural processes to provide and hence were designed.
- No natural means of fixing problems— the initial design must work.
- First cells must appear instantly or major components degrade.
- No natural means to convert a design into a physical object.
- If intelligence is required to do design work and if living cells have features that need to be designed, then natural processes cannot design cells. The design work must come from a supernatural being.
- Fabrication requires The Designer to move atoms and molecules where desired at will, working outside of natural law. I.e., “God created life.”

**Evidences for God from Science and Engineering Working Together**

### **How computer design engineering gives a model showing God created life.**

An information-controlled system can be designed by an intelligent being then built. Computers as well as computer-driven machines such as modern cars and microwave ovens are controlled by a combination of hardware and software. Everyone who has used a computer understands the software is useless without the hardware. The hardware is useless without the software. They are completely distinct entities, yet both need to appear in working form cooperating with each other before either has value. Both are extremely complex. Engineers understand that it is impossible for undesigned, random, step-by-step processes to provide the complex information/hardware interactions necessary to make a functioning computer. Yet, man can use his intelligence to design and fabricate a computer.

Living cells also have a complex body of information and special hardware to make use of it. Just as with computers, the genetic information stored the DNA and the cellular hardware need to process it must appear simultaneously before either has value. This is why biologists cannot explain the origin of information. The engineering model shows this first requires design then fabrication. However, in a cell the complexity observed for both the information stored in its DNA and the cellular hardware to process it far

exceeds anything man has ever designed. This suggests that cellular information and supporting hardware are the result of design by a being with intelligence that greatly exceeds that of a man.

Man uses elaborate tools to fabricate the components of a computer. However, there are no natural tools available to convert a design for a living cell into actual living cells. Once living cells appear, they can make copies of themselves by replication. Tools are no longer needed. Tools for cellular fabrication would be extremely complicated. There is no basis to expect required tools to appear briefly and spontaneously in nature. This suggests that the Designer also had to have the ability to move individual atoms and molecules into precisely defined, dynamic relationships with each other in order to make the first living cells. I.e., the Designer needed to have the ability to work outside of natural law at will.

What do you call an extremely intelligent being who has the ability to work outside of nature at will, doing so as He places atoms and molecules into predetermined arrangements in order to make something according to a design? You call Him God. The things we have learned from science and engineering working together lead us straight to the understanding that living cells are the handiwork of a living God. This is exactly what the Bible leads us to expect. Atheists who reject the possibility of such a God have spent seven decades of intense research trying to explain why God is not needed for the appearance of living cells. All they have to show for their evidence are paradoxes and failed experiments. Of all people, scientists and engineers have the training to understand these arguments. They should be the first to recognize them.

Furthermore, the Bible tells us in its opening chapter that God directly made man in His own image. Man reflects on a small scale many attributes God possesses on an unbounded scale, such as intelligence, insight, and the ability to make elaborate plans and carry them out. God created man in such a way that the creation is able to lead him into understanding God's eternal power and divine nature. God expects man to recognize Him and respond by worshiping Him in a spirit of thanksgiving (Romans 1:21).

It is intriguing that the Bible talks about how God works by planning then doing. Man is generally most effective when he first plans and then does. A totally undisciplined man rejects the advantages of this, but can end up going hungry as a result. Genesis 1, the opening chapter of the Bible, shows how God used the pattern of planning then making for His activity on each of the six days of creation. The same pattern applies as well for the entire sequence of days taken as a whole. Engineers by practice follow the pattern of first designing then fabricating. Engineers copy the approach God used in Genesis 1. The ability to design then fabricate appears to be a facet of man being created in God's image, as also explained in Genesis 1. Cats don't design cell phones. Neither do they build them. When man attempts to eliminate God as the Creator of life, he runs into nothing but failures and paradoxes. This is very well a general statement, but applies so broadly that it even encompasses discussions on the origin of life. If a man extrapolates from his limited capabilities for design to that required to design a living cell, he is led to the understanding that God created life. Furthermore, He is a personal God with eternal power and various personal attributes (divine nature). God says that man has no excuse if he doesn't understand this. So, from a Biblical perspective, the train of thought presented in this article appears to be exactly what God expects a person to understand. In response, a person needs to worship God, giving Him glory and thanksgiving. He needs to seek Him and submit His will to Him.

Man instinctively knows that God sets the standards of right and wrong and that He judges our adherence to them. This is why men make such an effort to suppress truth about God. They know but do not want to know.<sup>2</sup> Fortunately, God is also a God of grace, as discussed at the end of this article.<sup>3</sup>

There is a beautiful consistency in the picture presented here. Biblical teachings, engineering, science, God's nature, and man's nature all supplement each other in perfect harmony. This is satisfying to a person who knows Christ as his personal Savior and has a living relationship with God. The paradoxes and failures of abiogenesis should serve as a warning to those who rely only on naturalistic philosophy as a substitute for God. They are following the wrong path and need to change. Likewise, these same paradoxes and failures should serve as a wake-up call to those who profess faith in Christ, yet have believed the attacks on God and His Word in Genesis that are so boldly proclaimed by those who reject Him.

### **The Conflict between Many Modern Scientists and an Active God who Intervenes in His Creation**

There appears to be a simple explanation and resolution of the above conflict between modern science and the possibility of a living God intervening into the affairs of creation—modern science

oversteps its authority in its claims. Science is properly the study of what exists in nature and how it works. Careful measurements and repeatable experiments are the basic tools of science. However, serious confusion results when scientists intrude into other fields outside their proper domain. I.e., the problems come when scientists present themselves as authorities in engineering, in history, and in philosophy. The solution: recognize only legitimate science. I.e., recognize that true science describes the natural order when God is not intervening, but that He has the right and power to intervene whenever and however He wants. When this is done, the Bible and science are in complete harmony. The discrepancies:

**1) Scientists are not Engineers.** Engineers first design then make what they designed. Making things is the domain of engineering, not science. Engineers typically design complex systems with many components which need to cooperate with each other to provide a product that works. These products require a number of essential components such that missing any of them results in its failure. This applies to virtually everything engineers design related to our technological age, from computers to car engines. Yet, living cells are vastly more complicated than anything man can design and make. Moreover, engineering solves the problem of randomization, which plausibly presents a fatal roadblock to a natural origin of life. Scientist need to recognize that their proper domain is to recognize what exists and how it works. Engineers are the ones who transform existing materials into new products. Do not ignore engineering methodology while claiming to be authorities on how to make new things!

**2) Scientists are not historians.** Darwinian evolution is about history. It claims that over a period of billions of years bacteria gradually turned into fishes, birds, and people. However, history is not science and science is not history. The approaches between the two fields are the exact opposite. Science is primarily based on repeatable measurements and experiments with every factor that can affect an outcome defined before the experiment is run. By contrast, history is a one-time event which cannot be repeated. Most of the factors resulting in any particular historical event are unknown. This is particularly the case for events occurring in the distant past. Even the tools, goals, and appropriate conclusions are completely different between true science and history. As a result, evolutionary theory is outside the scope of legitimate science. Scientists should openly acknowledge this. As a side note, if there truly is a living God who intervenes into the affairs of the Earth, then scientists have even less authority to act as historians. They have no evidence available to tell what God may or may not have done. They do not have the tools or resources to make a proper analysis.

If a scientist denies that God intervened in an event when actually He did, he is guaranteed to be wrong in his conclusions. The intervention will have changed the outcome. Therefore, any explanation which does not account for it will of necessity be wrong. True science does not have the resources to measure God's intervention. An honest scientist will not pretend to be a historian.

**3) Scientists are not philosophers.** When a secular scientist makes public statements that science shows that natural processes are sufficient to explain everything that takes place in the universe, he lies. He takes an unproven philosophical statement, naturalism, and presents it as proven science. This is not science! Scientific studies on the origin of life are relevant here. It is in this field that the inadequacies of natural processes to create the life are not only crystal clear to anyone willing to look at the evidence, but are key to showing with strength and clarity just how limited natural processes are in what they can create. Anyone who is confused about how to reconcile Genesis 1 with the claims of these people should worry more about pleasing God than them. He is eternal.

We have already examined how there has not been a single successful experiment in abiogenesis. However, rather than acknowledge the problems, scientists merely refer to them as *paradoxes*.<sup>4</sup> They should just call them failures. However, that would destroy the credibility of naturalism. Unfortunately, it seems that a paradox appears whenever a scientist runs an experiment testing any hypothetical step of abiogenesis. In every experiment performed during the past seven decades, the observed results contradict required results. Every experiment has its own paradox. Something appears to be really, really wrong here.

This should make a strong case against a natural origin of life. Why do so many scientists still hold on to it so tenaciously? The answer is simple. If natural processes are demonstrably inadequate to provide

for the appearance of living cells, then naturalism is demonstrably invalid. Life would require a supernatural origin. The entire philosophical approach of modern secular science would collapse. Naturalism is how atheists attempt to justify their rejection of God. To them, admission of even one instance of failure for naturalism failing is unthinkable.

This concludes the Overview. There were many strong statements made here. These will be further developed and justified in the subsequent material. If there truly is a Creator God and if He holds people accountable to Him, finding the proper relationship with Him is the most important issue of life.

## 2. Detailed Analysis of Key Points

**Science and God.** Science is the analysis of what exists in nature and how it works. Its primary tool is called “the scientific method.” This is based on analysis of precise measurements and controlled experiments. As the experimental conditions are varied and retested, any changes in the outcome are analyzed. This analysis leads to deeper understanding to what is taking place. The results of an experiment must be repeatable to have meaning. This approach has proven effective in showing us what exists in nature and the principles governing its behavior. Science is the study of what exists in the universe and its normal behavior apart from when God intervenes.

Notice the last sentence above. It includes an upfront acknowledgement that science is the study of natural order whenever God is not intervening. I.e., it does not apply when He is. This last sentence is not normally included in the definition of science. It should be. The entire evolutionist vs. creationist controversy would be eliminated by adding this simple phrase to the definition and properly applying it.

Sadly, the modern secular scientist has no interest in adding this phrase. He is more committed to promoting philosophical naturalism than staying within the narrow field of measurements, experiments, and analyses. From the perspective of a naturalist, the above definition would be false because there is no such thing as a God to intervene, but implies there is. Besides, why would he want to limit access to tools he can use in his zeal to promote naturalism? The world already accepts him as an authority in anything he speaks about. He likes that prestige. His conscience likes it because it justifies his suppression of truth. He gladly latches on to an excuse to hide from the truth, because the truth interferes with how he wants to run his life. We can observe this behavior when we see how he responds to the results of his own experiments when he doesn't like them. Instead of accepting them, he calls them “paradoxes” and then proceeds to ignore them.

In the Overview we mention several areas where scientists present themselves as authorities in areas they aren't. These issues will be expanded on here. Notice how important these issues are.

**1. Science cannot test God's actions experimentally.** God is a sovereign being with a will and the power to work outside of natural law. As such, He is not subject to analysis by the scientific method. God's influence on events cannot be controlled by a scientist in an experiment. God's personal decision determines whether He does intervene in a specific instance, does not intervene, in what manner He intervenes if He does, or the extent of His intervention if He does. As a result, there is no valid experimental data about God for a scientist to analyze. Science has nothing legitimate to say about God's existence or non-existence or about His intervention or non-intervention into the affairs of the universe.

The origin of life and the origin of species are not proper subjects of scientific investigation. The scientific method is limited to what man can understand, control, and measure. It does not have the tools to determine whether or not God intervened in any particular event. Often in the early stages of learning about a subject, there will be variables that affect the outcome of an experiment that are unknown in their influence. Unknown variables can result in false conclusions. If it is known that an experiment contains unknown variables with the potential of greatly impacting results, then its data is not considered reliable and conclusions from analyzing it are not of great value. Since God's possible intervention on the origins of life and species is potentially great and since science has no means of analyzing how much intervention actually took place, God's influence is unknown. This prevents science from having anything relevant to say.

**2. Science is not history and history is not science.** As mentioned earlier, in history an event occurs one time. It is not repeatable, as is required by the scientific method. A person does not even know what all

of the variables were that influenced any specific historical outcome. He has no way of knowing if God intervened in a particular event nor what He did if He did intervene. Therefore, history is as far from the scientific method as it is possible to get. It is improper for a scientist to present himself as an authority on events that purportedly happened billions of years ago. This includes events such as the origin of life or large-scale, Darwinian evolution. This is outside his domain of authority.

Sadly, evolutionists present conclusions regarding large-scale, Darwinian evolution as supposedly being among the most established observations of science. Such statements are blatantly false. They represent statements of history, not the analysis of repeatable experiments. There is no such thing as a scientist running an experiment that takes millions or billions of years to perform.

**A side note on Darwinian evolution:** Many scientists say that evolution is a proven fact. This is true when they speak of microevolution. This can easily be demonstrated in the lab and is legitimate. Microevolution involves only a small modification in some particular trait of an already existing organism. The organism is still the same basic kind it started with. We hear about mutations and microevolution in Covid-19. However, SARS-CoV-2, the virus causing Covid-19 is still a virus.

Extrapolation of microevolution to Darwinian evolution, such as bacteria to cats, is an altogether different issue. The Bible allows for variation within originally-created kinds. An original *cat kind* initially created during the events of Genesis 1 could have been given most of the genetic information needed to allow the cat to very quickly evolve into all of the known cats today. A few mutations along the way could have been added to the cat's initial genetic information. However, extrapolation of microevolution to Darwinian evolution, such as bacteria to cats, is a different issue. This not only contradicts the Biblical account of Genesis 1, but presents major scientific problems. We will more about Biblical *kinds* later.

Proper scientific methodology traditionally uses extrapolation as a starting point for subsequent prediction and experimental confirmation. However, in everything except evolutionary theory, extrapolation into unexplored and unconfirmed areas is considered tentative until tested. Frequently, extrapolation uncovers new issues that were unexpected. For instance, Newton's laws of motion are valid under normal conditions. When attempts were made to extrapolate them down to the molecular level, unexpected inconsistencies appeared. Further analysis led to discover of an entire new field of science, quantum mechanics, operative at that level. Newton's laws cannot be extrapolated to systems approaching the speed of light, where relativity prevails. By contrast, evolutionists extrapolate microevolution into Darwinian evolution and present it as fact while ignoring evidence inconsistent with their philosophy.

Concerning Darwinian evolution, issues such as getting the new genetic information required to turn bacteria into cats presents a huge barrier. Scientists see the barrier and do not know how to get around it. So, until the barrier has been removed, a person should understand that science gives strong basis to reject the likelihood of bacteria becoming cats. Far from being scientifically proven, Darwinian evolution is a statement of history by a non-historian. It summarizes a series of imagined past events; it is not based on repeatable experiments. Most importantly, it ignores God's possible intervention. A scientist greatly misrepresents truth when he claims evolution on the scale of bacteria to cats or to man has been proven.

From this perspective, any discussion of Darwinian evolution or of reputed long ages does not belong in a science textbook. These are statements of historical guesswork, of hoped-for changes, of preferred philosophical perspectives, but not of experimentally tested and observed science. Perhaps people would like a scientist to be able to tell them what happened historically in things like the appearance of life and the origin of species. Those who do not want to worship and submit to God will in particular like a scientist to be able to do this. A scientist needs to be honest enough to say that he has nothing to say on the subject, that it is outside his area of expertise. In today's environment, that might not be a popular stand among his peers. It might even ruin a career. However, this is better than alienating a living God who can create a galaxy without getting tired, who is eternal, and who takes offense to anyone denying Him the glory He should rightfully receive. This particularly relevant when He states that His wrath is aroused against those who suppress truth about how the creation testifies of His person (Romans 1:18-).

**The historical sciences.** Some branches of science focus on events that happened in the distant past. Paleontology, historical geology, and cosmology are among these. These are sometimes called the

historical sciences. The problems with properly evaluating historical events have already been discussed. The influence of God is unknown. Many factors leading to the outcome of an event are unknown. Added to this is the ease that “authorities” have of censoring any analysis that challenges naturalism. These entire fields have false foundations and present conclusions that are unjustified. When only one side is presented, a case can appear much stronger than it is. Evolutionists understand this and therefore mock and slander evidence challenging their dialogue.

As a result of the ingrained biases present in these fields, assertions concerning dates and times are meaningless. For instance, creation scientists associate the fossil record with the worldwide flood of Genesis 6 and not the creation-day events of Genesis 1. Since this does not fit with naturalistic explanations, any evidence supporting this is ignored and those presenting it are mocked. The strength of the evidence is considered irrelevant. No allowance is made for the possibility that God could have intervened in any manner whatsoever. The standard of what is printed in their journals appears to be how well it conforms to the message they are trying to proclaim. Anything in opposition is censored. I was once a strong bacteria-to-man evolutionist because I thought truth required this. As I learned more, I gradually reversed my position. I now believe a person can be intellectually honest while ignoring the claims of those who are unwilling to openly acknowledge clear evidence for God such as presented here.

**3. Scientists do not make things, engineers do.** It is also important to understand that scientists do not study how to make things. This is the domain of engineering. Engineers are required to make things that that work. They are trained how to build structures that have many different components that need to fit together properly and simultaneously before any of them have any value. A living cell is full of these kinds of features. By contrast, when a scientist says that time and random changes are adequate to create life and new species, he is only making speculative statements. Worse than that, the speculation comes at the expensive of what engineers have learned. As mentioned, engineers find that almost everything built requires a certain minimum number of components that need to appear in finished form and assembled before they meet their purpose. However, this contradicts the slow, gradual steps required for evolutionary processes to provide new features, so biologists simply ignore the issue.

This issue should not be glossed over: Engineers have learned procedures that must be satisfied to provide new, complex structures. Ignoring them invariably results in failure. Natural processes are not exempt from the issues causing these problems. However, the engineering approach requires the use of intelligence in first providing a design which 1) defines all the parts that are needed, 2) defines their relationships to each other, and 3) defines how to fabricate them using available resources and tools. It then requires the ability to intervene in nature to do the fabrication. Naturalistic philosophy does not provide for the intelligence to design or the means fabricate a design. Therefore, in order to maintain their philosophical perspective, atheistic scientists ignore what engineers have learned about making new objects. Yet, when scientists ignore the principles of engineering and try to test their ideas in the lab, they consistently get little more than paradoxes and failures.

Because of the millions and billions of years needed to observe Darwinian evolution, it is universally recognized that this is outside the capability of man to observe directly. Therefore, a scientist can assume the right to propose anything he wants, spin it how he wants, and use his prestige as a scientist to make it sound true. This does not make it true.

**4. Philosophical statements do not represent science.** Earlier, we mentioned that the attitude of many modern scientists is, “In the end, natural processes will explain everything.” This is clearly a non-scientific attitude. No scientist can point to an experiment which justifies this statement. It is merely an unproven philosophical statement. Yet, these scientists claim that if anyone disagrees with their philosophy, they are to be called fake scientists, pseudoscientists. They then assert that as we learn more through new experiments, these will support their position. However, no one knows what the results of future, yet undefined experiments will be. Notice, the contention here is not over interpretation of observed evidence. It is over hoped-for future observations by atheistic scientists against currently observed ones by creationists. The evidence against abiogenesis is solid.

When a scientist asserts that a very long time ago natural processes made the original living cells and that these cells then evolved into various species, he is claiming to be an authority in history,

engineering, and philosophy. He is not. He is outside his field in all three areas. Therefore, the scientific method has nothing legitimate to say about origins. He should either keep his mouth quiet or make it clear that he is not speaking as a scientist but as one promoting his personal philosophy against observed evidence when he does give his opinion.

**A critical observation.** It is critically important to understand that science is limited in what it can tell us. For one example, it can tell us the *what happens* but not *why it happens*. If I drop a ball, it falls to the ground according to the laws of gravity. This represents valid science, because it can be studied by the scientific method. However, if I ask a scientist, “Why does gravity exist?” he does not have a legitimate answer. A scientist cannot tell us why energy, matter, and time exist, either. These issues are outside the scope of scientific investigation. We need to understand and accept the fact that many of the most interesting questions are outside the scope of science to give an answer. We also must be prepared to recognize that in today’s environment, many scientists like to ignore their personal limitations and make assertions beyond what is proper. A person needs to be prepared to reject what they say in such cases.

From this perspective, if someone were to ask a scientist where life comes from, it appears that his proper response should be that he can study what would be required to make a cell, he can study the potential for natural processes to meet the requirements, and he can evaluate whether there is a match between the two. However, it is outside his field to make claims on what happened historically, particularly as there appears to be a big discrepancy between what is needed for a cell and what natural processes can provide. He can also say that engineering provides a good model to suggest that an intelligent being with the ability to work outside of natural processes presents a viable model for how living cells could have happened. Beyond this a scientist has nothing legitimate to say.

Many evolutionists mock God. They claim that those who believe in God believe in a God of the gaps. I.e., when science has yet to learn something, people attribute it to God. As science learns more, there is less for them to believe. God is only useful for filling in the gaps until science can explain it. Sadly, modern science appears to present this as a foundational truth, not to be challenged. Yet, nothing could be further from actual truth. The material we presented on page 2 about how millions of different chemicals can be formed from a few simple elements plus the effects of randomization is solid science. It is not calling on an unknown God to fill in a gap we do not understand. It points to solid evidence we do understand. In truth, evolutionists use long periods of time to explain away all the experiments whose results contradict their theory. Yet, they seem to be unwilling to accept rational calculations that show this is not a reasonable position. They are the ones who clutch at straws to avoid the implications of solid evidence.

**5. How unbiased science supports a Creator: Virchow’s Aphorism.** Rudolph Virchow, a German scientist and medical doctor, reported in 1855 that “all cells come from cells.” In his honor, this observation is called “Virchow’s aphorism.” (An *aphorism* is a statement with profound meaning expressed in few words). 150 years ago, this aphorism helped establish modern cellular theory. Advances in technology since then have firmly confirmed it. It still has no known demonstrable exceptions. The current Wikipedia article on *Cell Theory* shows it as one of three components of modern cell theory. Observed science shows us a number of features that are essential for a group of chemicals to function as a cell and replicate. We understand what they are and why they are important. Until a group of chemicals are sufficiently organized to function as a complete living cell, they do not function as a cell. The organization required to do this involves almost every key feature. Information, metabolism, and cell membranes with active transport are the starting points of the requirements. Mere components certainly cannot make new cells capable of sustaining life. Cellular replication depends on the availability of most cellular functions. Scientists acknowledge that they currently have no way out of this problem.<sup>5</sup> Worse yet for abiogenesis, science shows that a cell needs to make a virtual instantaneous first appearance, as we have already discussed.

Virchow’s aphorism leads to a simple conclusion: a living cell must appear fully formed in a single step. Yet, scientists in general admit that it is irrational to believe that a functioning cell, complete with genetic information and operating metabolism, could appear in a single step. Their solution is to ignore Virchow’s aphorism when they discuss origin of life issues. It is not compatible with the message they want to promote, so they ignore it. Do you see a problem with this? Abiogenesis is a major branch of science.

Yet, strong evidence teaching against the plausibility of successful abiogenesis is ignored, not addressed. Somehow, this does not appear to be the lack of bias that scientists try to instill in their public image.

#### **6. Science that supports a Creator: A Specific Issue.**

I would like to mention that a relevant YouTube clip I have made about the problems associated with the formation of amino acids, the first step.<sup>6</sup> Carl Sagan was a scientist who presented a television series on PBS, *Cosmos*. This series is one of the most highly viewed in the history of public television. Sagan dedicated an entire episode of the series to reperforming Stanley Miller's origin-of-life experiment, which was a 1953 experiment that kicked off modern origin-of-life studies. Like most scientists of today, in his video meant for public consumption Sagan talks like his experiment was a success. **By contrast, in a science journal article normally read only by scientists**, he acknowledges that this same experiment demonstrated how it actually failed to produce chemicals that could be used in a succeeding step, as would be required for true success. He made inert tar, or *tholin* as he himself defined it. This product is inert. It is completely useless for an advance towards life. Furthermore, he points out that all experiments testing various alternatives to Miller's choice of variables used in the experiment have similar results. My video discusses the inconsistency between what he says in the video and in the journal article. To the public he announces it is a success. In the journal article, the same experiment produces only a useless, inert, tar-like substance he calls tholin. If you think I am overstating things, check out the video!

**Science properly defined.** If a person uses the definition of science we suggested earlier, "Science is the study of what exists in nature and how it works apart from when God intervenes," the entire perspective changes. We are then free to consider all of the evidence available and see where it leads. It turns out that instead of persistent, pervasive paradoxes to be ignored, we have a beautiful, consistent scheme with everything fitting together smoothly. The problems come when scientists go outside their field and pretend that they are also historians, engineers, and philosophers as they try to take the Creator God out of the picture.

**The role of faith.** God gives us reasons to believe. Even so, it is still a matter of the heart whether or not a person believes. Judas saw Jesus do most of His miracles, apparently performed some himself, continually heard preaching that directly addressed his need to get right with God, and saw in Jesus a preacher whose manner of life was consistent with His words. Yet, all Judas was concerned about was how much money he could get from being associated with Jesus. Judas turned a deaf ear to his responsibility to submit to and to worship God. This should be a warning to all of us. God gives us evidence. He then expects us to respond to this evidence with gratitude and thanksgiving as we worship Him. Our motive is properly that of worshiping and glorifying Him from a pure heart, not to get Him to serve us. Faith is still required. However, it can be a faith with a solid conviction that it is founded on well-established truth.

### **3. Thomas Huxley, the X Club, and the hijacking of modern science**

During the 1860s and 1870s, Thomas Huxley and an informal group of friends who identified themselves as the "X Club" led the way to convert science into a vehicle to promote naturalism, which is the philosophy that the behavior of physical objects is governed exclusively by natural processes. Supernatural processes are assumed not to exist. Therefore, there is no place for any god's supernatural intervention into the events of history now or at any other time. Huxley and friends rejected the Biblical account of creation. They would openly call those who believed it "stupid." Darwin's *Origin of Species* was an eye-opener for Huxley. Huxley did not believe that Darwin succeeded in making his case. However, he was fascinated by Darwin's approach to use naturalistic explanations to interpret historical events. To Huxley, Darwin showed how to cross the mountain, even if he didn't manage to cross it himself. The new goal of science became to find the right path. In the course of less than twenty years, the entire philosophic atmosphere was changed from theism to naturalism, mostly because of the efforts of this group. However, even though Huxley and friends were its leaders, the bulk of those who followed them wanted to go the direction they were taking and were glad to follow.

Huxley's approach may be summarized as follows:

- 1) Assume that natural processes are sufficient in themselves to explain everything that exists.

- 2) Never engage directly with a creationist in a format which gives him any kind of credence.
- 3) Assert that it is a waste of time to talk with a creationist or allow his position to be discussed openly—the discussion never goes anywhere. (This was actually because Huxley wouldn't listen.)
- 4) Use slander to mock the training of and intellectual capabilities of a creationist. Claim the reason it is a waste of time to talk to him is because he never understands the arguments.
- 5) Only positions which support unguided evolution and stand against miraculous intervention of any kind of god are given credence. Everything else is to be mocked then ignored.
- 6) Use behind-the-scenes power plays to give professional advantage to those who take this position while also attempting to block the advancement of those who do not. This applies in particular to professors who teach at the university level and to editors of science journals. Today, it has become extended to those who control research grants. A scientist who takes a stand against naturalism finds that he gets cut off from grant money. This can be fatal; a scientist's career is largely determined by his ability to fund his research projects through grants.

The above approach continues to this day. Modern science assumes materialism (naturalism) is sufficient to explain everything that takes place and has taken place. This tradition started with Charles Darwin, Thomas Huxley and members of the British "X Club" in the 1860s and 1870s. It has dominated scientific discussion since then. However, science historians acknowledge that materialism was not actually proven in open scientific dialogue at this time, but was only claimed to be true by its proponents. Huxley and those in his camp then used behind-the-scenes power plays to establish the materialist position while stifling discussion of any contrary evidence. A detailed 18-page discussion of how materialists hijacked science in the 1860s and 1870s is found in the fourth of the five articles I authored and which are available free online at [www.trbap.org/5articles-long.pdf](http://www.trbap.org/5articles-long.pdf).

#### 4. The Compatibility of Observations of a Literal Genesis and Science/Engineering

Observed science appears to agree better with a literal understanding of Genesis 1, the opening chapter of the Bible, than it does with evolutionary theory:

**1) The engineering model of specification followed by implementation.** In the creation account presented in the Bible, God is represented as creating various specific items as a two-step process. For instance, in verses 3, 6, 9, 11, 14, 20, 24, and 26 of Genesis 1, we read phrases similar to "Let there be...and there was." This shows preplanning. Something was first defined and then subsequently fabricated. For all practical purposes, this is the engineering method. When an engineer designs a computer or a refinery, or an automobile engine, he basically follows the same methodology the Bible presents as how God brought about the appearance of life on the earth. Furthermore, the days of creation themselves appear to be part of a preplanned sequence which was implemented according to plan within a short time period.

By contrast, the naturalistic/evolutionary model attributes the appearance of cells to unguided, random associations over long periods of time. We discussed at the beginning how this model appears to be ineffective in accounting for major cellular features. It seems clear that the observations of science and engineering taken together are more compatible with the Biblical model of preplanned design than the evolutionary model of untargeted, random, step-by-step progress. In fact, whenever an engineer designs anything, it appears that he is putting into practice the process attributed to God as His approach to creating life on the earth. This leads to the second observation:

**2) The allowed time span.** Science shows original cells needed to be formed within minutes, before degradation destroyed progress. Naturalists claim cellular formation was a slow, gradual process over extended periods of time, typically at least millions of years. The Bible implies life was created extremely quickly. Genesis 1 attributes significant events of creation as taking place within part of a single 24-hour day. Science appears to be more consistent with the Bible than it is with evolutionary theory.

**3) The chicken first or the egg first?** A common riddle is, "Which came first, the chicken or the egg?" Most biologists teach that reproduction of self-replicating molecules came first (the egg). In time these molecules evolved into fully functioning, living cells. Yet, this appears to be directly contradicted by Virchow's

aphorism. Scientists have no explanation of how to bridge the gap between a hypothetical self-replicating molecule and an autonomous living cell with a genome and metabolism. By contrast, Genesis 1 provides a solution to this paradox. In several places this chapter discusses how God created organisms with their seed (means of reproduction) in themselves. Thus, the Bible teaches that its God created the first instances of the various kinds of organisms fully formed from the beginning and which also had an inherent capability to reproduce and multiply. Thus, chickens were created instantly and were fully formed, including their initial capacity to form eggs. God made the first instances of a kind. He made them so that after they had been formed, they were able to reproduce and to multiply on their own. The Bible incidentally, without fanfare, answers a basic question that people have pondered for years: Scientific observation is more compatible with Genesis 1 in the Bible than it is with current understanding of abiogenesis.

**4) The problem of failed steps due to randomization.** This has already been extensively discussed.

**5) Debug Issues.** Engineering design typically involves extensive debug. Engineering debug requires a design specification, specialized test equipment to isolate problems during tests, and an engineer with sufficient intelligence to isolate problems using these resources. The engineer must also have sufficient creativity to figure out how to fix the problems once identified. The naturalistic approach provides none of the resources required for debug. The limited time span of mere minutes before degradation begins in a non-functioning cell would not allow opportunity for debug even if required resources were available. Natural processes offer no known means to work around these issues. The Bible presents a God whose understanding is without limit and would have the inherent capability to get a design correct the first time; His designs would plausibly not require debug. After each of the six days in Genesis 1, God evaluated what He had accomplished and pronounced it “good.” As a retired design engineer, I can testify that a good design is one which meets its target specification without defects. This is the significance of the evaluation, “Good.” By contrast, the naturalistic/evolutionary approach is based on partially working features generated randomly and then debugging them through randomizing processes. However, no naturally existing, reasonable means of debug is known. Observed science offers no mechanism to debug non-living chemicals in order to convert them into living cells. The Biblical model of creation by a God of sufficient intelligence to fabricate a “good” design—i.e., one correct without requiring debug—is more compatible with the requirements of scientific observation than is the naturalistic/evolutionary model.

**6) Biblical kinds: closer to a taxonomic family than to species.** Much confusion has come about from misunderstanding the meaning of Biblical “kinds” talked about in Genesis 1. A good summary of the issues can be found at [https://creationwiki.org/Created\\_kind](https://creationwiki.org/Created_kind). From the Biblical perspective, God created kinds. When one works through the issues, it appears they were most typically at the taxonomic family level. The original kinds would have had sufficient genomic information for rapid specialization in succeeding generations. The specialists rapidly came to represent genera and species. They did this at the cost of losing original information. There is no conflict between the Bible and specialization. Sometimes specialization is called microevolution, although this definition can have other meanings and so can be ambiguous. There is much evidence for evolution at this level. By contrast, most people think of evolution as being at the level to convert bacteria into men. This requires huge blocks of new information. Creationists reject this because:

- 1) It is against how the Bible presents the creation of kinds.
- 2) Plausibly, many of the issues that prevent abiogenesis would apply here, meaning there would be no chemical method to implement macroevolution.
- 3) Most of the evidence given to support macroevolution is consistent with specialization and hence proves nothing. The remaining evidence for macroevolution is not only sketchy but lopsided in its presentation—all kinds of assumptions are presented as fact and any contrary evidence is ignored. It is beyond the scope of this paper to say much more about this.

**7) Top-down design.** There are two basic approaches engineers use in designing a complex project, called top down and bottom up. Let’s illustrate the approaches by considering the steps to build a house.

In top-down design, the first step is to decide what kind of house is desired. The design starts with its basic purpose. A single person who keeps to himself and is economically deprived will want a different house than a wealthy person who entertains a lot. Starting from there, general details need to be defined,

such as the basic size, how many stories, how many and what kind of rooms, whether there is a basement, and the proper foundation needed to support the weight of the house. Once the general layout is determined, more and more details get designed.

In bottom-up design, one starts with small details and tries to join them. Using this approach, a person designs a room before he knows what the rest of the house looks like and how it fits in. As he keeps adding more and more, he needs to go back and redesign what he started with in order to get things to fit. The process is time consuming and the end result is chaotic. An experienced engineer can immediately identify the work of a not-so-well trained novice because it is chaotic and inefficient compared to that of a well-trained and experienced engineer.

Even more chaotic than bottom-up design is the approach of a biologist to the origin of life. In this case, there is not even a design or a purpose. It would be like a monkey being given some saws, hammers, wood, nails, window glass, roofing material, and door hinges. He is to use the tools on the raw materials without any purpose or guidance. He has no clue that it is even possible to build anything with them. What is the likelihood that he could build a small shack with a roof to keep the rain out as well as a window and door in it? Yet, this is more than a natural setting offers for the origin of life.

When an engineer looks at the extremely high level of organization in a living cell, it gives every indication of preplanned top-down design by a super-intelligent being. The unguided, random processes proposed by biologists might have made sense in Darwin's day. That was before we understood how involved the internal structures of a cell are. Beyond this, when one looks at the organization inherent in our own bodies, it becomes irrational to assert that unplanned, unguided, random activity formed us.

**8) Beauty.** I once talked to an artist who explained her concept of beauty. "Beauty is a combination of organization and variation. The pattern of a window screen is boring because it is too monotonous—too much organization. It is the same everywhere. There is nothing to communicate. By contrast, if something has lots of variation but no organization, it is boring. Pure noise is boring because it doesn't communicate anything." She asked me to look at a large picture she had just finished. At the center was an important person. He was the focal part of the painting and was bigger than the others. His face provided a theme. There were about a dozen other people in the picture. All of the faces were different. Each represented a different personality. There was organization: A dozen or so people with the face of the larger center one establishing a theme. There was meaningful variation: The other faces were variations of the main theme. The variations between them made the picture interesting as an observer compared similarities and differences between them and the central figure. I was able to understand what she was talking about and did appreciate what she as a professional had done to make the painting interesting and beautiful. A good artist demonstrates his creativity by how he manages organization and variation to produce beauty.

I was a Christian at the time. Even as she was speaking, I understood how this explained what makes nature so beautiful. Wherever we look in nature, we will find organization mixed with variation. It is in observing the interplay between these two features that distinguishes beautiful from monotonous. All oak trees are immediately recognized as oak trees. They follow a common basic structure. But no two oak trees are alike. There is variation between them. Each has its own unique identity and character. The variations within a common theme draws our interest. A forest is beautiful because of the way God naturally places organization and structure. As a retired industrial design engineer, I am very familiar with manufacturing facilities. When man designs a product, he tries to make every one that comes off an assembly line come as close to the design specification as possible. Ideally, every unit will look exactly alike. There is no variation and watching products come off the line quickly gets boring. The difference between what man makes and God makes is overwhelming. God wants us to praise Him for the beauty He places in His design. No two things are alike, even as the Bible teaches.<sup>7</sup> This is a testimony of God's creativity.

All of a sudden, my perspective of a branch of science called *comparative anatomy* was completely transformed. Evolutionists claim one of the strongest proofs of evolution are what they call *homologous structures*, which are studied in comparative anatomy. One can supposedly follow evolutionary development by how common structures such as forelimbs change between reptiles, birds, and mammals. A Google Images search on "homologous structures forelimbs" reputedly shows evolutionary development between different species of their forelimb bone structure patterns. Closest to the body is one bone. It

extends and is connected to a combination of two bones. Ultimately, at the end are typically five bones, although sometimes a few of these are removed. To me these patterns do not represent evolution! They represent God's demonstration of His creativity! He takes a common structure, such as forelimbs, and has wide ranging variations within it. However, these variations are not continuous, as evolutionary theory would lead us to expect. They are separate, distinct variations based on a common theme. For instance, an anatomist can normally immediately identify which family a particular bone came from and sometimes its genus and species. This would be difficult to do if the changes between fish and men were gradual and continual. A creationist finds beauty in the way God mixes order—the common bone structural plan—with variation—how it varies between the needs of different kinds of animals.

True comparative anatomy is more consistent with the Biblical kinds in 6) above than is evolution. The changes in patterns occur in discrete jumps, not continuous modifications. This is why an anatomist can immediately recognize where a particular bone belongs. Incidentally, Darwin observed these discrete jumps in *Origin of Species*. He was so bothered by them that he devoted a complete chapter to the problem they presented. He concluded that they represented an argument that could reasonably be used against his theory. He was right! The variations show God's creativity, not evolutionary changes! Darwin should have listened to his concerns instead of struggling how to explain them away. Praise God for His beautiful works!

If life cannot appear spontaneously, naturalism is dead. This would demonstrate that natural, naturalistic processes are in themselves incapable of generating life. In this case, science would demonstrate that naturalism is not sufficient to explain everything. If there are no living cells to evolve, then general evolution (macroevolution) cannot take place. This changes all of the "rules of the game." Furthermore, the testimony of science and engineering taken together lead straight to the understanding that a personal, living God is the Creator of life as well as the universe it lives within. True science glorifies God, it does not provide ammunition to attack Him.

**5. Final Remarks.** Having established that true science and the Bible support each other, The issue of whether we are here by an act of a living God or from the operation of unguided, randomizing processes is important. Unlike discussion of the best opening move in a chess game, how a person responds to the issues discussed here potentially has eternal significance.

Genesis Chapter 1 proclaims that the God of the Bible directly created the heavens, the Earth, and the life we see on Earth. Chapter 2 declares that as Creator He has the right to establish rules for our behavior and to judge us if we disobey. Chapter 3 demonstrates that God exercises His right to rule and to judge. Chapter 4 reveals that God is willing to be reconciled to us through a proper offering—but only on the terms He establishes. The importance of these chapters makes them a target for any who do not like the message they contain. The third chapter of Genesis describes a historical event with consequences still affecting us today. Adam, the first man, and Eve, his wife, chose to disobey God in the hope that their action would result in them acquiring greater wisdom and experiencing a fuller life. Moreover, they could do this without consequential judgment. Man is still pursuing this goal today. We are descendants of Adam and Eve—ones who rejected God's authority over them, wanting to become their own gods. They wanted to determine truth according to their own wisdom. They were the world's first humanists.

Unsaved man has no desire to submit His will to a holy God. In line with the promise Satan made to Eve in the Garden, man wants to be his own god, determining for himself what is right and wrong. Jesus said that "He who sins is a slave to sin (John 8:34). An unsaved man does not have a personal, living relationship with God. To him God is merely one who takes offense to the things that to him make life worth living and to which he is enslaved. In an effort to soothe his conscience about God, he vociferously attacks the legitimacy of the opening chapters of Genesis. Since he does not have a personal relationship with God, he finds that the standards of a holy God are too stifling and too restricting for him to live by. He does not understand the inward joy and deep satisfaction within the one who knows God and has an intimate personal relationship with Him. Those who claim to be believers and yet reject a literal understanding of these chapters in Genesis imply that God was not accurate in them, even though they are so essential to everything that follows. The people implicitly agree with atheistic materialists that the

arguments for naturalism are stronger than those for a literal interpretation of these chapters. As a pastor, I believe this offends God greatly. God honors belief. He also gives strong reasons for belief.

God hates idolatry. This theme runs throughout both Old and New Testaments. God is a jealous God and He judges idolatry severely (Deuteronomy 4:24-29, Romans 1:18-2:5). He will not give His glory to another (Isaiah 42:8, 48:11). In traditional idolatry, physical objects are worshiped instead of God. He hates this. In modern society a physical process—natural selection—is worshiped. None of the wisdom and creative power God used to plan and make the various life forms around us is acknowledged. Instead, all of the credit is given to a mindless process, natural selection. Modern idolatry is more subtle and dangerous than traditional. Physical idols have no power, yet can get a powerful grip on a person's mind. By contrast the process of natural selection is claimed to have such great power that it can account for the appearance of all of the various life forms around us. Since, according to Romans 1, natural man wants to suppress truth about God and turn to idolatry, the hold of evolutionary theory on unsaved man is potentially even stronger than traditional idolatry. We can readily observe this in how desperately biologists still cling to a natural origin of life despite all of the evidence God provides showing He made it. Sadly, unsaved man wants idolatry to be true. From Romans 1, God's wrath is aroused by the worship of any form of idolatry. He alone is worthy of worship. This natural bias for idolatry is a spiritual issue to be fought against.

God is a God of love. He demonstrated this in sending Christ to die as our substitute, bearing the punishment we deserve for our sins. The Bible states in Romans 5:8, "...while we were still sinners, Christ died for us." This is true love! Nonetheless, Christ Himself spoke about eternal judgment in Hell almost more than any other issue. It is the truth of Hell that motivated Christ to die for our sins. It is foolish for someone to claim to rely on Christ for salvation while rejecting what He taught. This shows he still hates the light (John 3:16-21). God sets standards for salvation. His love provided a means of reconciliation to those who want reconciliation—but He also reveals that salvation is only available under His terms (Genesis 4). His love does not provide an excuse for the behavior of those who in their hearts still reject Him and His Word, wanting Him to submit to their conditions. This was the mistake of Cain in Genesis 4. Woe to the one who in his heart believes that the arguments presented by those who reject God are stronger than what God has given us in His Word and for His Word. Woe to leaders who teach others these things even while claiming to be His servants. Give the living Creator God glory by believing Him and His Word!

The fifth of the five articles mentioned above serves two purposes. First, it uses shows how Jesus fulfilled various prophecies concerning the Messiah in the Old Testament. This is presented as evidence to confirm that the God of creation and the God of the Bible are plausibly one and the same.

However, there is something bigger in Jesus than merely representing fulfilled prophecy. These passages present Him as Savior, as uniquely the One who can reconcile us to a just and holy God. The issue of whether the God of the Bible is the God of Creation has significant and eternal ramifications. Perhaps this is best explained by a passage in the Bible, Romans 1:18-20:

<sup>18</sup>For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who suppress the truth in unrighteousness,<sup>19</sup>because what may be known of God is manifest in them, for God has shown it to them. <sup>20</sup>For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse.

I would like to examine the contents of this passage in reverse order, starting with verse 20. This verse implies that the God of the Bible designed the creation, including the life that is in it, to reveal His person—that is, His eternal power and Godhead. Earlier we saw how the combined observations of science and engineering plausibly led to the origin of life as being the product of an Intelligent Being who had the characteristics of a personal God. According to verse 20, this is exactly what we should expect to find. Truly unbiased engineering and science work together to lead a person to the understanding that a living, personal God created the life we see around us. It can be effective in doing this because God designed the creation to do this. I believe the arguments presented in the earlier discussion were clear and powerful. God says the evidence from creation leading to understanding basic qualities of His person are so clear that HE counts a person as without excuse who rejects the testimony. This paper attempts to show how.

Verse 19 says that God works within each one of us individually to show us that He exists. He uses the creation to do this. So, deep down every one of us knows this God truly is the Creator.

The last half of verse 18 talks about how the natural reaction of man (i.e., each person individually and societies as a whole) is to suppress personal knowledge of God. I believe the reason for this is that the word "Godhead" in verse 20 refers to His nature as God and this includes His holiness. God shows each of us individually through our conscience that He is holy and that we are sinful. It is the guilt we naturally experience because of the sin in our life and the personal recognition that this sin offends God that causes us to reject God as Creator. We do not want to know of a holy God. It is in response to this common reaction that verse 18 closes with the statement that we suppress truth about God because of our sin. However, doing this is dangerous. The first part of verse 18 tells us that God's wrath is aroused by our ungodliness and unrighteousness. There are severe, eternal consequences to the sin we covet. We need to run to the truth, not from it by suppressing it.

So, the true reason men hate the opening chapters of Genesis is not because of science as much as it represents an effort to deny their accountability to God. Science becomes an excuse to ignore the warnings. It appears to be easier for us to sear our consciences if we can somehow make science appear to justify rejection of the inward testimony God gives each of us personally. Yet, doing this only increases God's wrath in a coming day of judgment. God sees the inward motives of our hearts.

Earlier we mentioned that God in His love makes reconciliation with Him possible. This is what Genesis chapter 4 is all about. However, He tells us His terms; we don't tell Him our conditions.

The basis for forgiveness is simple. The 5th article in the collection mentioned earlier talks about how Messianic prophecy in Isaiah 53 tells of a coming Savior (Jesus Christ) who will offer Himself as a sacrifice to pay for the sins of men. God declared that this Savior would offer Himself as a sacrifice over 700 years before it took place. In the proper time this is exactly what happened as God sovereignly carried out His plan. The prophecy was not mere foresight. It was revealing a specific action God had determined to do, which in time He did do. This is the power of the God we need to serve.

The Bible reveals that God already existed in the beginning (of eternity). Jesus existed as God with God in the beginning. In time, He was made flesh (John 1:1-2, 14), becoming fully man and fully God. He was made flesh for our sakes, to bear our sins. God in His love for us took the penalty for our sins onto Himself. These things are to be believed as revealed by God concerning Himself. Our response reveals our degree of submission.

If God is working on your heart even now to seek reconciliation with Him, call on Him with your lips to save you, submitting to Him as Lord. He is worthy of obedience in this life. Come to Him relying on the sufficiency of the once-for-all sacrifice of Jesus on the cross to wash you from your sins. Rely on Him in His resurrection to receive you into eternity as a new child of God. He promised that all who come to Him in this manner will be received (See Romans 10:9). After receiving Christ, you should also be immersed (baptized) in the name of the Father, Son, and Holy Spirit (See Matthew 28:19).

"You are worthy, O Lord, to receive glory and honor and power; for You created all things, and by Your will they exist and were created." Revelation 4:10

## Author's Background

Timothy Stout, author of this paper, graduated from UCLA in physics in 1966, while the Viet Nam War was active. At graduation he was on the Dean's list for academic excellence. Because of the war, graduate school was precluded and he needed to work as an engineer in the defense industry. During this time, he married and acquired a family. Ultimately, the next four decades were spent as an industrial design engineer.

Two decades were as an electronics hardware engineer working with virtually all aspects of computer-related systems. Frequently, he would be part of a team of hardware engineers working with software engineers in the effort to design complex systems of interacting hardware and software. Most of this took place in Silicon Valley, where the microprocessor was invented and which ultimately became recognized as the "hot spot" of the world for formation of new companies exploiting the use microprocessors in new applications. The descriptions in this article of the difficulties of getting hardware and software to work together properly and the difficulties of debug are the result of decades of personal industrial experience dealing with these issues.

He also has approximately two decades of work as a mechanical engineer/physicist in desalination. He has received four U.S. patents for invention of new fabrication techniques in desalination technology. These include one posted online at <https://patents.google.com/patent/US5423952A> and another at <https://patents.google.com/patent/US7476298B2>.

Mr. Stout made a personal study of SARS-COV-2, the virus causing COVID-19. In early June of 2020, he published an article in preprint at [www.osf.io/usx58](http://www.osf.io/usx58) which shows that the virus appears to be manmade. Eight months later an article<sup>8</sup> was published in *Nature*, the world's premier science journal, which appears to have incorporated most of his ideas, thus confirming his analysis. *Nature* did not cite him.

Mr. Stout was an outspoken evolutionist/atheist during his early college years. Discussion with Christians about the kinds of issues similar to those discussed here ultimately led to his conviction that an unbiased analysis of all of the data supported the Biblical account better than evolutionary dogma. Sadly, the classrooms seemed more intent on promoting humanism and naturalism than on openly discussing all of the relevant issues. Ultimately, he came to believe that God created the universe and the life that is in it, even as presented in the Bible. He also trusted Jesus Christ as his Lord and Savior. He has also attended seminary and has a decade and a half of experience as a church pastor.

This paper represents a synthesis of Mr. Stout's perspectives as a professional design engineer and service as a church pastor.

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### References

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<sup>1</sup> <https://www.osf.io/p5nw3>

<sup>2</sup> Romans 1-3

<sup>3</sup> Romans 4 -6

<sup>4</sup> <https://www.sciencemag.org/news/2015/03/researchers-may-have-solved-origin-life-conundrum>

<sup>5</sup> <https://doi.org/10.1083/jcb.201506125>

<sup>6</sup> <https://www.youtube.com/watch?v=3pYcxFbSs0o&t=316s>

<sup>7</sup> 1 Corinthians 15:40

<sup>8</sup> <https://doi.org/10.1007/s10311-021-01211-0>